***Listing of the Claims*:**

1-42. (Canceled)

43.   (New) A method for making computing applications throughout an enterprise aware of business events, comprising:

defining objects in an enterprise object model that model data and services provided by back-office systems;

brokering interactions, by an enterprise integration layer, between the back office systems that provide data and services and front-office systems that use the enterprise integration layer to access the data and the services provided by the back office-systems through the interactions, brokering the interactions comprising:

receiving, from the front-office systems, accesses to objects of the enterprise object model in the enterprise integration layer through client access interfaces of the enterprise integration layer, wherein each of the client access interfaces corresponds with a different technology and provides a standardized interface through which the front-office systems access the objects of the enterprise object model;

implementing, with a business object server of the enterprise integration layer coupled to the client access interfaces, data functions and service methods associated with the accessed objects that enable

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the interactions between the front-office systems and back-office systems; and

transforming, with a set of adapters of the enterprise integration layer coupled to the business object server, the accessed objects into a format of the back-office systems corresponding with the implementation of the data functions and the service methods associated with the accessed objects;

automatically publishing, by the enterprise integration layer, business events in accordance with the interactions between the front-office systems and back-office systems;

automatically subscribing, by a messaging system coupled to the enterprise integration layer, to the business events published by the enterprise integration layer; and

automatically generating, by the messaging system, for each of the subscribed business events a message that makes computing applications that are interested in the business event aware of the business event.

44. (New)   The method of claim 43, further comprising:

defining and storing rules in a rules engine within the enterprise integration layer, the rules including rules regarding when to automatically publish the business events in accordance with the interactions, rules regarding the

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transforming of the accessed objects of the enterprise object model to the format of the back-office systems, and rules regarding mapping each of the back-office systems to an appropriate adaptor in the set of adaptors,

wherein the business events are automatically published in accordance with the interactions and the rules regarding when to automatically publish the business events.

45. (New)   The method of claim 43, further comprising:

defining, in a business event repository within the enterprise integration layer, the business events that are of interest to the computing applications; and

identifying, in the business event repository, all of the publishers for each of the business events.

46. (New)   The method of claim 43, further comprising:

holding, in a metadata repository within the enterprise integration layer, metadata supplied by the set of adaptors that enables the transforming of the accessed objects of the enterprise object model to the format of the back-office systems.

47. (New)   The method of claim 43, wherein the business events are key milestones within a process flow.

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48. (New)   The method of claim 43 wherein implementing data functions and service methods associated with the accessed objects further comprises:

> performing one or more of object assembly, object disassembly, and service invocation functions, wherein performing object assembly includes creating a composite object by aggregating data from a plurality of the back-office systems, performing object disassembly includes breaking a composite object into multiple objects for storage in at least one of the back-office systems, and performing service invocation includes determining which functions to invoke on one or more of the back-office systems.

49. (New).   The method of claim 43, wherein one of the business events occurs upon the implementation of the data functions and the service methods associated with the access objects, including one or more of creating data, reading data, updating data, deleting data, and invoking one of the service methods.

50. (New)   The method of claim 43, wherein the automatic generation of the message for each subscribed business event further comprises:

> mapping, by one or more adaptors of a transformation layer of the messaging system, data corresponding to the business events published by the enterprise integration layer between a format of a source of the business events and a format of the computing applications.

51. (New)   The method of claim 50, further comprising:

transforming, by a source application adaptor of the one or more adaptors, data related to a business event from a format of a source of the business event to a standard data format; and

transforming, by a target application adaptor of the one or more adaptors, data from the standard data format to a format of a target subscribed to the business event.

52. (New)   A method for making computing applications throughout an enterprise aware of business events, comprising:

> brokering interactions, by an enterprise integration layer, between back office systems that provide data and services and front-office systems that use the enterprise integration layer to access the data and the services provided by the back office-systems through the interactions, brokering the interactions comprising:
>
>> receiving, from the front-office systems, accesses to common format descriptions in the enterprise integration layer of the data and the services provided by the back-office systems through client access interfaces of the enterprise integration layer, wherein each of the client access interfaces correspond with a different technology and provide a standardized interface through which the front-office systems access the common format descriptions of the data and the services provided by the back-office systems;
>>
>> implementing, with a business object server of the enterprise integration layer coupled to the client access interfaces, data functions and service methods associated with the accessed common format descriptions of the data and the services, wherein implementing the data functions and the service methods enable the interactions between the front-office systems and back-office systems; and

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transforming, with a set of adapters of the enterprise integration layer coupled to the business object server, the accessed common format descriptions of the data and the services into a format of the back-office systems corresponding with the implementation of the data functions and the service methods associated with the accessed common format descriptions of the data and the services;

defining and storing rules in a rules engine within the enterprise integration layer, the rules including rules regarding when to publish business events in accordance with the interactions between the front-office systems and the back-office systems;

automatically publishing, by the enterprise integration layer, the business events in accordance with the rules;

automatically subscribing, by a messaging system coupled to the enterprise integration layer, to the business events published by the enterprise integration layer; and

automatically generating, by the messaging system, for each of the subscribed business events a message that makes computing applications that are interested in the business event aware of the business event.

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53. (New)   The method of claim 52, further comprising:

defining objects in an enterprise object model that model the data and the services provided by the back-office systems,

wherein the objects in the enterprise object model are the common format descriptions of the data and the services provided by the back-office systems.

54. (New)   The method of claim 52, further comprising:

defining, in a business event repository within the enterprise integration layer, the business events that are of interest to the computing applications.

55. (New)   The method of claim 52, further comprising:

holding, in a metadata repository within the enterprise integration layer, metadata supplied by the set of adaptors that enables the transforming of the accessed common format descriptions of the data and the services to the format of the back-office systems.

56. (New)   The method of claim 52, further comprising:

providing distributed transactional quality of service through a transaction processor within the enterprise integration layer.

57. (New)   The method of claim 52, further comprising:

> making data persistent within a local data store of the enterprise integration
> layer.

58. (New)   The method of claim 52, wherein the business events are key milestones
within a process flow.

59. (New)   The method of claim 52, further comprising:

> using previously existing infrastructure services within the enterprise for the
> enterprise integration layer.

60. (New)   The method of claim 59, wherein the previously existing infrastructure
services are selected from a group of services consisting of a naming and directory
service, a security service, and an application management and monitoring system.

61. (New)   The method of claim 60, wherein the previously existing infrastructure
services include each of a group of services comprising a naming and directory service,
a security service, and an application management and monitoring system.

62. (New)   A method for making computing applications throughout an enterprise aware of business events, comprising:

brokering interactions, by an enterprise integration layer, between back office systems that provide data and services and front-office systems that use the enterprise integration layer to access the data and the services provided by the back office-systems through the interactions, brokering the interactions comprising:

receiving, from the front-office systems, accesses to common format descriptions in the enterprise integration layer of the data and the services provided by the back-office systems through client access interfaces of the enterprise integration layer, wherein each of the client access interfaces corresponds with a different technology and provides a standardized interface through which the front-office systems access the common format descriptions of the data and the services provided by the back-office systems;

implementing, with a business object server of the enterprise integration layer coupled to the client access interfaces, data functions and service methods associated with the accessed common format descriptions of the data and the services, wherein implementing the data functions and the service methods enable the interactions between the front-office systems and back-office systems; and

transforming, with a set of adapters of the enterprise integration layer coupled to the business object server, the accessed common format descriptions of the data and the services into a format of the back-office systems corresponding with the implementation of the data functions and the service methods associated with the accessed common format descriptions of the data and the services;

defining, in a business event repository within the enterprise integration layer, business events that are of interest to computing applications in the enterprise;

identifying, in the business event repository, all publishers for each of the business events;

automatically publishing, by the enterprise integration layer, the business events in accordance with the interactions between the front-office systems and back-office systems;

automatically subscribing, by a messaging system coupled to the enterprise integration layer, to the business events published by the enterprise integration layer; and

automatically generating, by the messaging system, for each of the subscribed business events a message that makes the computing applications that are interested in the business event aware of the business event.

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63. (New)   The method of claim 62, further comprising:

defining objects in an enterprise object model that model the data and the services provided by the back-office systems,

wherein the objects in the enterprise object model are the common format descriptions of the data and the services provided by the back-office systems.

64. (New)   The method of claim 62, further comprising:

defining and storing rules in a rules engine within the enterprise integration layer, the rules including rules regarding when to automatically publish the business events in accordance with the interactions, rules regarding the transforming of the accessed common format descriptions of the data and the services into the format of the back-office systems, and rules regarding mapping each of the back-office systems to an appropriate adaptor in the set of adaptors,

wherein the business events are automatically published in accordance with the interactions and the rules regarding when to automatically publish the business events.

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65. (New)   The method of claim 62, further comprising:

> holding, in a metadata repository within the enterprise integration layer, metadata supplied by the set of adaptors that enables the transforming of the accessed common format descriptions of the data and the services to the format of the back-office systems.

66. (New)   The method of claim 62, further comprising:

> providing distributed transactional quality of service through a transaction processor within the enterprise integration layer.

67. (New)   The method of claim 62, further comprising:

> making data persistent within a local data store of the enterprise integration layer.

68. (New)   The method of claim 62, wherein the business events are key milestones within a process flow.

69. (New)   The method of claim 62, further comprising:

> using previously existing infrastructure services within the enterprise for the enterprise integration layer.

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70. (New)   The method of claim 69, wherein the previously existing infrastructure services are selected from a group of services consisting of a naming and directory service, a security service, and an application management and monitoring system.

71. (New)   The method of claim 70, wherein the previously existing infrastructure services include each of a group of services comprising a naming and directory service, a security service, and an application management and monitoring system.

72. (New)   A method for making computing applications throughout an enterprise aware of business events, comprising:

> defining objects in an enterprise object model that model data and services provided by back-office systems;

> brokering interactions, by an enterprise integration layer, between the back office systems that provide data and services and front-office systems that use the enterprise integration layer to access the data and the services provided by the back office-systems through the interactions, brokering the interactions comprising:

>> receiving, from the front-office systems, accesses to objects of the enterprise object model in the enterprise integration layer through client access interfaces of the enterprise integration layer, wherein each of the client access interfaces corresponds with a different technology and provides a standardized interface through which the front-office systems access the objects of the enterprise object model;

>> implementing, with a business object server of the enterprise integration layer coupled to the client access interfaces, data functions and service methods associated with the accessed objects that enable the interactions between the front-office systems and back-office systems; and

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transforming, with a set of adapters of the enterprise integration layer coupled to the business object server, the accessed objects into a format of the back-office systems corresponding with the implementation of the data functions and the service methods associated with the accessed objects;

defining and storing rules in a rules engine within the enterprise integration layer, the rules including rules regarding when to publish business events in accordance with the interactions between the front-office systems and the back-office systems;

automatically publishing, by the enterprise integration layer, the business events in accordance with the rules;

automatically subscribing, by a messaging system coupled to the enterprise integration layer, to the business events published by the enterprise integration layer;

transforming, by a source adaptor of the messaging system, data related to at least one of the business events from a format of a source of the at least one of the business events to a common data format;

publishing, by a message interface of the messaging system, the at least one of the business events and the transformed data related to the at least one of the business events in the common data format;

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transforming, by a target application adaptor of the messaging system, the data related to the at least one of the business events from the common data format to a format of a target application subscribed to the at least one of the business events published by the message interface of the messaging system; and

processing the at least one of the business events by the target application.

73. (New)   The method of claim 72, wherein the at least one of the business events and the transformed data related to the at least one of the business events are combined in a single packet and published by the messaging interface of the messaging system or are independently published by the messaging interface of the messaging system.

74. (New)   The method of claim 72, wherein the business events are key milestones within a process flow.

75. (New)   A method for making computing applications throughout an enterprise aware of business events, comprising:

defining objects in an enterprise object model that model data and services provided by back-office systems;

brokering interactions, by an enterprise integration layer, between the back office systems that provide data and services and front-office systems that use the enterprise integration layer to access the data and the services provided by the back office-systems through the interactions, brokering the interactions comprising:

receiving, from the front-office systems, accesses to objects of the enterprise object model in the enterprise integration layer through client access interfaces of the enterprise integration layer, wherein each of the client access interfaces corresponds with a different technology and provides a standardized interface through which the front-office systems access the objects of the enterprise object model;

implementing, with a business object server of the enterprise integration layer coupled to the client access interfaces, data functions and service methods associated with the accessed objects that enable the interactions between the front-office systems and back-office systems; and

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transforming, with a set of adapters of the enterprise integration layer coupled to the business object server, the accessed objects into a format of the back-office systems corresponding with the implementation of the data functions and the service methods associated with the accessed objects;

defining, in a business event repository within the enterprise integration layer, business events that are of interest to computing applications in the enterprise;

identifying, in the business event repository, all publishers for each of the business events;

defining and storing rules in a rules engine within the enterprise integration layer, the rules including rules regarding when to publish the business events in accordance with the interactions between the front-office systems and the back-office systems;

automatically publishing, by the enterprise integration layer, the business events in accordance with the rules;

automatically subscribing, by a messaging system coupled to the enterprise integration layer, to the business events published by the enterprise integration layer;

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automatically generating, by the messaging system, for each of the subscribed

business events a message that makes the computing applications that

are interested in the business event aware of the business event.

76. (New)   The method of claim 75, wherein the automatic generation of the

message for each subscribed business event further comprises:

mapping, by one or more adaptors of a transformation layer of the messaging

system, data corresponding to the business events published by the

enterprise integration layer between a format of a source of the business

events and a format of the computing applications.

77. (New)   The method of claim 76, further comprising:

transforming, by a source application adaptor of the one or more adaptors, data

related to a business event from a format of a source of the business

event to a standard data format; and

transforming, by a target application adaptor of the one or more adaptors, data

from the standard data format to a format of a target subscribed to the

business event.

78. (New)   The method of claim 75, wherein the business events are key milestones

within a process flow.